

REMARKS

The allowance of claims 4, 5, 10, 11, 16 and 17 is gratefully acknowledged by the Applicant.

Claims 1, 7, and 13 have been amended and new claims 19 and 20 have been added. Claims 1-20 are pending in the present application. Applicant reserves the right to pursue the original claims and other claims in this application and in other applications.

Claims 1-3, 6-9, 12-15 and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Nakanishi et al., U.S. Patent No. 5,701,597 (hereinafter "Nakanishi"). The rejection is respectfully traversed.

Claim 1 as amended recites a "secondary-battery control circuit" comprising "a first path supplying a first load current from one or more secondary batteries connected in series or parallel, to a system, and including a first cutoff switch; and a second path supplying a second load current from said one or more secondary batteries to the system." According to claim 1, the "first cutoff switch is turned off if the first load current is greater than a predetermined current, thereby cutting off the first load current to the system." Applicant respectfully submits that Nakanishi fails to disclose the invention recited in claim 1.

Nakanishi discloses a battery pack for a portable device. The Nakanishi battery pack relied upon by the Office Action includes two batteries 12, 14 (where each battery 12, 14 comprises one or more batteries connected together) connected to a main unit 38 by arguably two different paths that include control switches 40, 42, 44 (see FIG. 10). Nakanishi discloses a technique for disconnecting "one battery whenever it becomes significantly more discharged than the other battery." Col. 7, ll. 34-36. The

premise of the Nakanishi invention is to utilize as much charge as possible from each battery 12, 14.

Nakanishi, however, never discloses, teaches or suggests turning off a "first cutoff switch . . . if the first load current is greater than a predetermined current." Nakanishi by contrast only relates to determining if a battery is discharged. This is entirely different from determining whether there is an over current situation. Since Nakanishi cannot detect and does not teach detecting "if the first load current is greater than a predetermined current," Nakanishi cannot anticipate claim 1. Thus, for at least the foregoing reasons, claim 1 is allowable over Nakanishi. Claims 2-3 and 6 depend from claim 1 and are allowable along with claim 1. Claims 7-9 and 12 contain similar limitations as claim 1 and are allowable for at least the reasons set forth above and on their own merits.

Claim 13 as amended recites a portable device comprising a secondary-battery control circuit that includes "a first path supplying a first load current from one or more secondary batteries connected in series or parallel to a system, and including a first cutoff switch; and a second path supplying a second load current from said one or more secondary batteries to the system." According to claim 13, "said first cutoff switch is turned off if a voltage of said one or more secondary batteries is lower than a first predetermined voltage, or if the first load current is greater than a predetermined current, thereby cutting off the first load current to the system, but not disconnecting any of said one or more secondary batteries or the second load current from the system."

Nakanishi discloses two paths, one each for two separate batteries 12, 14. In operation, Nakanishi, unlike the claimed invention, disconnects the more discharged battery when its corresponding cutoff switch is opened. This means that the

disconnected battery is no longer supplying a current to the rest of the system (i.e., there is no second path from the disconnected battery). The claimed invention, on the other hand, cuts off the first load current, but does not disconnect "any of said one or more secondary batteries or the second load current from the system." This means that the "one or more secondary batteries " of claim 13 are still connected to the system by the second path when the first load current is cut off. This is desirable and advantageous because e.g., remaining-charge indicating circuitry and/or resetting circuitry can remain powered and functional without the use of external components. See Specification p. 22, l. 25 to p. 24, l. 16. Nakanishi simply cannot do this. Thus, Nakanishi fails to disclose the claimed invention.

For at least the foregoing reasons, claim 13 is allowable over the cited reference. Claims 14-15 and 18 depend from claim 13 and are allowable along with claim 13 for at least the foregoing reasons and on their own merits. Applicant respectfully submits that the rejection should be withdrawn and claims 1-3, 6-9, 12-15 and 18 allowed.

New claim 19 depends from claim 1 and is believed to be allowable along with claim 1. New claim 20 depends from claim 7 and is believed to be allowable along with claim 7.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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Respectfully submitted,

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